Overview of the Federal Reserve's Payments System Risk Policy

Federal Reserve System
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Preface

This document was developed to assist depository institutions in complying with the policy statements of the Board of Governors of the Federal Reserve System regarding the use of intraday Federal Reserve credit, commonly called “daylight overdrafts.” This policy represents an integral component of the Federal Reserve’s ongoing efforts to control risk in the payment system, efforts known as the Payments System Risk, or PSR, program.

The *Overview* is designed to be used by depository institutions that use only minimal amounts of intraday Federal Reserve credit. As a result, it presents a general overview of the PSR program, focusing particular attention on the Federal Reserve’s policies to reduce daylight overdrafts in Federal Reserve accounts. Institutions that use Federal Reserve intraday credit on a more regular basis, together with those that may be considered “special cases” as a result of their legal or financial structure or their payment activities should obtain a copy of the *Guide to the Federal Reserve’s Payments System Risk Policy* from any Federal Reserve Bank for a more comprehensive presentation of the requirements for compliance with the Federal Reserve’s policies.

Should the Federal Reserve find it necessary to modify the PSR policies in the future, the policy statements issued by the Board of Governors would supersede information in the *Over-view* until it could be updated accordingly.

The organization of the *Overview* is as follows:

- Section I provides an overview of the PSR policy, including a brief review of its history and objectives.

- Section II provides a description of daylight overdraft net debit caps and a summary of procedures for a depository institution to follow in filing a cap resolution or in determining if it is eligible for the Exempt-from-filing status.

- Section III discusses requirements for compliance with the policy on daylight overdraft caps, including actions that Reserve Banks may take when an institution exceeds its daylight overdraft cap.

- Section IV provides information on fees that the Federal Reserve is charging institutions for daylight overdrafts (effective April 14, 1994).

- Section V describes methods and procedures for an institution to use in intraday monitoring and control of its Federal Reserve account balance.

- Section VI presents an overview of risks involved in providing payment services to customers and suggested means of controlling these risks.

- The Appendices provide supplementary material, including information on the new transaction posting rules for measurement of daylight overdrafts in Federal Reserve accounts, and a glossary of terms relating to the PSR program.

I. Payments System Risk Policy Overview

In *1985*, the Board of Governors of the Federal Reserve System adopted a policy to reduce the risks that large-dollar payment systems presented to the Federal Reserve Banks, to the banking system, and to other sectors of the economy. An integral component of the Federal Reserve Board's Payments System Risk, or PSR, policy is a program to control the usage of intraday Federal Reserve credit, which is commonly referred to as "daylight credit" or "daylight overdrafts."

A daylight overdraft occurs at any point in the business day when the balance in an institution's account becomes negative. Daylight overdrafts can occur in accounts at Reserve Banks as well as at private financial institutions. Daylight credit can also arise in the form of net debit positions of participants in private payment systems. A daylight overdraft occurs at a Reserve Bank when there are insufficient funds in an institution's Federal Reserve account to cover outgoing funds transfers or incoming book-entry securities transfers, or as a result of other payment activity processed by the Reserve Bank, such as check or automated clearing house (ACH) transactions.

Policy history

The Federal Reserve first published a policy statement on risks in large-dollar wire transfer systems in 1985. This policy required that institutions incurring daylight overdrafts in their Federal Reserve accounts as a result of Fedwire funds transfers establish a maximum limit, or net debit cap, on overdrafts incurred in that account.

In subsequent years, the Federal Reserve expanded the original PSR policy by addressing the control of risks in activities such as ACH transactions, book-entry securities transfers, offshore dollar clearing and netting, and certain private securities clearing and settlement systems. In addition, the Federal Reserve has made a number of modifications to the original program to reduce daylight overdrafts, such as reductions in the multiples of capital that determine net debit caps, as well as the creation of an exempt status for institutions that incur only minimal daylight overdrafts, which greatly reduces the administrative burden associated with PSR policy compliance.

In 1992, the Board of Governors approved a policy that established a schedule of fees to be assessed for institutions' use of Federal Reserve daylight credit beginning in April 1994. Along with the overdraft fee policy, the Federal Reserve adopted a modified method of measuring daylight overdrafts that more closely reflects the timing of actual transactions affecting an institution's intraday Federal Reserve account balance. This measurement method comprises specific account posting times for different types of transactions; these posting times were effective October 14, 1993.

Objectives of the PSR policy

As in the case of private institutions that offer payment services to customers, Federal Reserve Banks may be exposed to risk of loss when they process payments for institutions that hold accounts with them. The Federal Reserve guarantees payment on transactions made by account holders over the Fedwire funds transfer system. If an institution were to fail after sending a funds transfer that left its account in an overdraft position, the Federal Reserve would be obligated to cover the payment and bear any resulting losses. Risk is present even when an institution overdraws its account at a Reserve Bank only for a few minutes during the day. The Federal Reserve's exposure is not insignificant. The total of depository institutions' peak daylight overdrafts in Federal Reserve accounts was approximately $70 billion per day, on average, during 1997.

Similar types of risk are generated by intraday overdrafts incurred by customers of private financial institutions and by participants in private payment arrangements. In addition, daylight credit may be a source of systemic risk in the payment system, which refers to the potential transmission of one institution's inability to discharge its payment obligations through the payment system to many other institutions in the financial markets. Systemic risk has the potential to affect broader economic activity as well.

The Federal Reserve Board's PSR program is intended to assist Reserve Banks and depository institutions in controlling these risks. The PSR policy established limits on the amount of Federal Reserve daylight credit that may be used by a depository institution during a single day or over a two-week period. These limits are sufficiently flexible to reflect the overall financial condition and operational capacity of each institution using Federal Reserve payment services. The policy also permits Reserve Banks to protect themselves from the risk of loss by requiring collateral to cover daylight overdrafts in certain circumstances, or by restricting the use of Federal Reserve payment services by institutions that incur frequent, excessive overdrafts.

The objective of the fees that the Federal Reserve is charging for daylight overdrafts is to provide a financial incentive for institutions to control their use of intraday Federal Reserve credit and to recognize explicitly the risks inherent in the provision of intraday credit. Once subject to the daylight overdrafts fees, institutions may be induced to make business decisions concerning the amount of intraday Federal Reserve credit they are willing to use based on the cost of using that credit. The daylight overdraft measurement method, which incorporates a set of nearly real-time transaction posting rules, should also help institutions control their use of Federal Reserve intraday credit by providing greater certainty about how their payment activity affects their Federal Reserve account balance during the day.

Role of the board of directors

As a general matter, an institution's directors are responsible for establishing and implementing policies to ensure that management follows safe and sound operating practices, complies with applicable banking laws, and prudently manages financial risks. Given these responsibilities, directors play a vital role in the Federal Reserve's efforts to control risks in the payment system.

At a minimum, an institution's board of directors should undertake to do the following: (1) to understand the institution's practices and controls regarding risks assumed when processing large-dollar transactions for both its own account and the accounts of its customers or respondents; (2) to establish prudent limits on the daylight overdraft or net debit position that the institution may incur in its Federal Reserve account and on privately operated clearing and settlement systems; and (3) to review periodically the frequency and dollar levels of daylight overdrafts to ensure that the institution operates within the guidelines established by its directors.

II. Daylight Overdraft Caps

Under the Federal Reserve's PSR program, each depository institution that maintains a Federal Reserve account is assigned or may establish a daylight overdraft net debit cap. This section discusses the different types of cap categories and methods of establishing a cap.

Net debit caps

An institution's daylight overdraft net debit cap, or cap, refers to the maximum dollar amount of uncollateralized daylight overdrafts that the institution may incur in its Federal Reserve account. The dollar amount of the net debit cap is determined by an institution's cap category, or class, and its reported capital. There are six cap categories: Zero, Exempt-from-filing, *De minimis*, Average, Above average, and High. Each cap category is associated with cap multiples, which are shown in the Cap Multiple Matrix below.

Cap Multiple Matrix

Cap Categories	**Cap Multiples**	
	Single Day	Two-Week Average
Zero	0	0
Exempt-from-filing*	$10 million/0.20	$ 10 million/0.20
De minimis	0.40	0.40
Average	1.125	0.75
Above average	1.875	1.125
High	2.25	1.50

***** The net debit cap under the Exempt-from-filing category is the **lesser** of 0.20 multiplied by risk-based capital or $10 million.

An institution's net debit cap, sometimes referred to as its daylight overdraft capacity, is calculated as its cap multiple times its risk-based capital, as shown in the equation below.

Net debit cap = *Cap multiple x Capital*

Depending on its cap category, an institution may have two different cap multiples, one for its maximum allowable overdraft on any day ("single-day cap"), and one for the maximum allowable average of its peak daily overdrafts for a two-week period ("two-week average cap"). Institutions in the Zero, Exempt-from-filing, and *De minimis* cap categories have just one cap that applies to both the single-day peak overdraft and the average overdraft for a two-week period. Because a net debit cap is a function of an institution's capital, the dollar amount of the cap will vary overtime as the institution's capital changes. An institution's cap category, however, is normally fixed over a one-year period.

Establishing a cap

An institution can establish its cap category by filing a cap resolution with its Reserve Bank, or it can be assigned a cap category by its Reserve Bank. Generally, only **those institutions that regularly incur daylight overdrafts of more than $10 million or 20 percent of their capital on a single-day or two-week average basis are required to file a cap resolution.** Institutions that do not file cap resolutions are assigned either the Exempt-from-filing or the Zero cap category. An institution that has not filed a resolution may contact its Reserve Bank to determine which cap category it has been assigned.

Zero cap

An institution in the Zero cap category has a net debit cap of zero and thus may not incur daylight overdrafts in its Federal Reserve account, although in some cases it may be permitted to incur overdrafts provided they are fully collateralized, as discussed in Section III. An institution may voluntarily adopt a Zero cap if its management policies do not allow any use of intraday Federal Reserve credit. If it chooses to adopt the Zero cap category, the institution should send a letter to its Reserve Bank requesting this designation. A voluntary Zero cap will remain in effect until the institution files an appropriate cap resolution, discussed below, or until the institution becomes eligible for the Exempt-from-filing status and requests that the Reserve Bank assign it to the exempt category.

In addition, an institution may be assigned the Zero cap category by its Reserve Bank. Institutions that may pose special risks to the Reserve Bank, such as those without access to the discount window, those incurring daylight overdrafts in violation of the Federal Reserve's PSR policy, or those in financially weakened condition, are generally assigned the Zero cap category. Newly-chartered institutions may also be assigned the Zero cap category.

Exempt-from-filing

The Exempt-from-filing category permits institutions to incur daylight overdrafts up to a net debit cap of $10 million or 20 percent of their capital, whichever amount is smaller. If a Reserve Bank determines that an institution is eligible for exempt status, it will assign this category without requiring any additional documentation. As a result, the Exempt-from-filing cap category substantially reduces the administrative burden associated with obtaining a net debit cap. The majority of depository institutions that hold Federal Reserve accounts are granted this exempt status.

The Exempt-from-filing cap status is granted at the discretion of the Reserve Bank. To be eligible for this cap category, an institution must be in healthy financial condition, and it should use only minimal amounts of intraday Federal Reserve credit. Specifically, an institution should not recently have incurred daylight overdrafts in its account of more than $10 million or 20 percent of its risk-based capital, whichever amount is smaller. No more than two overdrafts above this limit may occur over a four-week period (that is, over two consecutive two-week reserve maintenance periods). An institution may contact its Reserve Bank for verification that it has been granted or is eligible for exempt status.

A depository institution with a new Federal Reserve account may be eligible for exempt status if it is considered to be in healthy financial condition. Furthermore, if an institution assigned the Exempt-from-filing cap category later determines that it requires more daylight overdraft capacity, it may file a cap resolution, described below, to increase its net debit cap.

Cap resolutions

Financially healthy institutions that regularly incur daylight overdrafts in excess of the Exempt-from-filing limitations must file a resolution with their Reserve Bank for a cap category that accommodates their normal use of intraday credit. These institutions should obtain the *Guide to the Federal Reserve* s' *Payments System Risk Policy,* which contains a more detailed description of procedures involved in completing a cap resolution, as well as sample resolutions. The following is a summary of the types of cap categories requiring a cap resolution and methods for establishing them.

The *De minimis* cap category allows institutions to incur peak daily and two-week average daylight overdrafts up to a cap of 40 percent of capital. In order to establish the *De minimis* cap category, an institution's board of directors must submit a resolution to the Reserve Bank approving the institution's use of intraday Federal Reserve credit in an amount up to 40 percent of its capital.

The Average, Above average, or High cap categories are referred to as "self-assessment" cap categories. Self-assessment caps are based on higher multiples of capital and therefore permit higher overdrafts than *De minimis* caps. In performing the self-assessment required to establish one of these cap categories, an institution must evaluate four components: its creditworthiness, intraday funds management and controls, customer credit policies and controls, and operating controls and contingency procedures. The results of the self-assessment determine the selection of an appropriate cap category for the institution. Further details of the self-assessment process are provided in the *Guide to the Federal Reserve's Payments System Risk Policy.*

Once completed, the results of the self-assessment must be reviewed and approved by the institution's board of directors. The directors' approval must be communicated to the Reserve Bank by submission of a board-of-directors' resolution. The Reserve Bank will review the cap resolution for appropriateness, in conjunction with the institution's primary regulator. Should the Reserve Bank determine that the cap resolution is not appropriate, the institution will be informed that it should reevaluate its self-assessment and submit another resolution.

De minimis and self-assessment cap resolutions are valid for one year after the date of resolution. Institutions with *De minimis* caps must renew their cap resolution annually by submitting a new resolution, and institutions with self-assessment caps must perform a new self-assessment and submit a cap resolution. Procedures for submitting this resolution are the same as those for establishing a new cap; however, institutions may submit a cap resolution for a different cap category than their existing category. Cap renewal resolutions are also reviewed for appropriateness by the Reserve Bank, in conjunction with an institution's primary regulator.

Because the self-assessment process may, in some cases, require considerable time to complete and approve, institutions should be aware of the expiration date of their cap resolution well in advance. If a new cap resolution is not received by the expiration date, an institution may be assigned a Zero cap, which would generally preclude any use of daylight credit.

Special cases

Under the Federal Reserve's PSR policy, special rules or procedures, not detailed in this document, may apply to certain institutions. **Institutions that may fall into any of the categories discussed below should obtain a copy of the *Guide to the Federal Reserve's Payments System Risk Policy* for more information on compliance with the Federal Reserve's policy.**

Affiliated entities

Net debit caps are applied on a consolidated basis for Edge Act and agreement corporations and all of their branches, for all offices of U.S. agencies and branches of the same foreign bank, and for domestic institutions with Federal Reserve accounts in more than one Federal Reserve district. These institutions are assigned an Administrative Reserve Bank, which has primary responsibility for monitoring the institution's compliance with the Federal Reserve's policies on daylight overdrafts.

Caps are administered separately for each legally incorporated depository institution within a holding company. However, in some cases, the financial condition of an affiliated institution may have a material effect on the condition of other members of the holding company and could affect these affiliates' cap categories.

As part of the PSR policy, the Federal Reserve allows the transfer of funds over Fedwire among affiliated domestic institutions for the purpose of simulating consolidation up to the sending institutions' net debit cap, provided certain conditions are met. These conditions include establishing certain controls and obtaining the approval of the institution's board of directors and its primary regulator.

CEBA institutions

Institutions subject to the Competitive Equality Banking Act of 1987 (CEBA), such as nonbank banks or certain industrial banks, may not incur daylight overdrafts on behalf of affiliates. For such institutions, rights grandfathered under CEBA may be revoked if overdrafts prohibited by CEBA are incurred. However, nonbank banks are permitted to incur overdrafts on behalf of affiliates that are primary dealers in government securities, provided such overdrafts are fully collateralized. In enforcing these restrictions, the Federal Reserve uses a separate formula for calculating intraday Federal Reserve account positions for these institutions.

Foreign institutions

Branches and agencies of foreign banks may be eligible for the Exempt-from-filing status or may file a cap resolution with their Administrative Reserve Bank. For these institutions, the Federal Reserve's policy includes separate procedures for determining U.S. capital equivalency used in calculating net debit caps. The capital measurement method may vary depending on whether the institution is based in a country that adheres to the Basle Capital Accord. Other special procedures, involving self-assessments, collateralization of overdrafts, and allocation of caps, also apply to branches and agencies of foreign banks.

Other special situations

Special rules and procedures also apply to certain bankers' banks, limited purpose trust companies, and Edge Act and agreement corporations. These institutions do not have access to the discount window and therefore may not generally establish positive net debit caps for daylight overdraft purposes. For Edge Act and agreement corporations, any daylight overdrafts incurred must be fully collateralized. Bankers' banks and limited purpose trust companies are assigned a Zero net debit cap for daylight overdraft purposes. Bankers' banks that voluntarily hold reserves may be eligible for a positive net debit cap, however.

Confidentiality of caps

The Federal Reserve considers daylight overdraft caps and cap categories to be confidential information and will only share this information with an institution's primary supervisor. **Institutions are also expected to treat their cap information as confidential.** Cap information should not be shared with outside parties or mentioned in any public documents.

III. Net Debit Cap Compliance

This section describes the standards used in determining compliance with the Federal Reserve's PSR policy that limits an institution's daylight overdrafts to its net debit cap. The consequences of breaches of an institution's daylight overdraft cap are also discussed in this section.

In conjunction with ensuring compliance with the Federal Reserve's policy, institutions are expected to monitor their Federal Reserve account balances and payment activity during the business day. Monitoring of account balances and daylight overdrafts is discussed further in Section V.

Monitoring cap compliance

Reserve Banks examine institutions' intraday account activity for compliance with the PSR policy following each reserve maintenance period. The Daylight Overdraft Reporting and Pricing System (DORPS), described further in Section V, is used for this monitoring process. Institutions with more than one Federal Reserve account are monitored on a consolidated basis; that is, a single account balance is derived by adding together the end-of-minute balances of each account.

A cap breach occurs when an institution's account balance for a particular day shows one or more negative end-of-minute account balances in excess of its single-day net debit cap. In addition, a cap breach would occur if an institution's average peak daily overdraft over a reserve maintenance period were greater than its two-week average cap. This two-week average overdraft is calculated by adding together the largest overdraft, if any, incurred for each day during a reserve maintenance period and dividing that sum by the number of business days in the period.

Institutions in the Exempt-from-filing cap category may not incur more than two cap breaches in a four week period (that is, in two consecutive two-week reserve maintenance periods). Institutions in the *De minimis* or self-assessment cap categories are permitted to incur overdrafts related to Fedwire book-entry securities transfer activity, within limits described below, but each cap breach resulting from funds transfer activity is considered a policy violation. In addition, a Reserve Bank may waive a cap violation if it determines that the overdraft resulted from circumstances beyond the institution's control, such as an operational failure on the part of a Reserve Bank.

Overdrafts caused by book-entry securities transfers

Book-entry securities transactions over Fedwire are initiated by the institution sending the securities. The receiving institution may not, therefore, be able to control the time that securities are delivered to its securities account and its funds account is correspondingly debited. As a result, daylight overdrafts caused by book-entry securities transfers are treated differently under the PSR policy. DORPS calculates a separate end-of-minute account balance using only debits and credits resulting from book-entry securities transfer activity for each institution. This allows Reserve Banks to determine whether a particular daylight overdraft was caused by book-entry securities activity, or by other account activity, such as funds transfers.

The Federal Reserve allows institutions to increase their effective daylight overdraft capacity by pledging collateral to cover all or a portion of their book-entry securities-related overdrafts ("book-entry overdrafts"). Such secured book-entry overdrafts are excluded from the calculation of overdrafts subject to the net debit cap, thereby increasing the amount of capacity available for funds transfers and other activity. Regardless of collateral pledged, however, **institutions may not increase their capacity for overdrafts above their net debit cap for those overdrafts not caused by book-entry securities activity.** In addition, Reserve Banks may require collateral to cover overdrafts not related to book-entry securities activity in certain circumstances.

Furthermore, if an institution incurs book-entry overdrafts in excess of its cap that are considered frequent and material, the institution will be required to fully collateralize all of its book-entry overdrafts. "Frequent" is defined to be more than three overdrafts in two consecutive reserve maintenance periods. To be considered "material" the overall overdraft must be more than 10 percent above the institution's net debit cap, and the book-entry related portion of the overdraft must be equal to more than 10 percent of the cap.

Consequences of cap violations

A net debit cap violation may initiate a series of actions by the Reserve Bank aimed at deterring future overdraft activity. These actions depend on the size and frequency of the overdrafts and on the financial condition of the institution. Initial actions taken by the Reserve Bank may include an assessment of the causes of the overdraft and a review of account management practices. An institution may be required to submit documentation specifying actions to be taken to address the overdraft problems.

If cap violations continue to occur, an institution may be required to increase clearing balances or pledge collateral to cover its overdrafts. For a healthy institution in the Exempt-from-filing, voluntary Zero, or *De minimis* cap categories, the Reserve Bank may recommend that the institution perform a self-assessment and file a cap resolution to obtain a higher net debit cap. Alternatively, the Reserve Bank may assign the institution a Zero cap. An institution could also face account activity restrictions, such as rejection of Fedwire funds transfers in excess of the account balance, or restrictions on the availability of funds from non-Fedwire activities, such as check, ACH, and currency transactions.

Finally, institutions are responsible for advising their board of directors of any daylight overdraft cap policy violations. Reserve Banks may also keep institutions' primary regulator apprised of any recurring overdraft problems.

IV. Daylight Overdraft Fees

In 1989, the Federal Reserve first proposed that institutions be charged a fee for daylight overdrafts incurred in Federal Reserve accounts. In September 1992, the board of Governors of the Federal Reserve System approved the assessment of daylight overdraft fees, effective April 14, 1994. Institutions are now charged a fee for all daylight overdrafts incurred in their reserve and clearing accounts, subject to the deductible and waiver provisions discussed below. This section describes how the fees are to be calculated and assessed. **The calculation of daylight overdraft fees is not related to institutions' net debit caps,** which are described in Section II.

In addition, the Federal Reserve's transaction posting rules, discussed in Section V are used to measure an institution's account balance for daylight overdraft policy compliance and affect the calculation of overdraft charges as well. As a result, institutions that do not have direct access to the Fedwire system, but do use other Federal Reserve payment services, such as check or ACH, may be assessed daylight overdraft charges.

Calculation of charges

Daylight overdraft fees will be calculated and assessed for each two-week reserve maintenance period. For each reserve maintenance period, the charge is equal to the sum of any *daily' charges*, that is, the daylight overdrafts charges calculated for each day during the period. For each day, the *gross overdraft charge* is equal to the *effective daily rate* charged for daylight overdrafts multiplied by the *average overdraft* for the day. The *daily charge* is equal to the *gross overdraft charge* less the *deductible* valued at the effective daily rate. This calculation is illustrated in the following equations and in the example shown on the next page.

Gross overdraft charge = *Effective daily rate x Average overdraft*

and

Daily charge = *Gross overdraft charge* **-** *Value of the deductible.*

The *average overdraft* for each day is calculated by adding together any negative end-of-minute balances incurred during the standard operating day of the Fedwire funds transfer system, and dividing this amount by the number of minutes in the standard Fedwire operating day.[2] **All end-of-minute overdrafts incurred during the Fedwire day, including those not exceeding an institution's net debit cap and any collateral posted, are included in this calculation.** Positive account balances on a given day are effectively set to zero and do not offset any overdrafts incurred that day in computing the average daylight overdraft amount. The occasional

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[2] The standard operating day for the Fedwire funds transfer system currently extends from 12:30:00 a.m. Eastern time to 6:30:59 p.m. Eastern time, a total of 1081 minutes.

extensions of Fedwire beyond the standard 18-hour day do not affect the number of minutes used in computing the average overdraft, although the closing account balance may be affected, as discussed in Section V.

In calculating the *daily charge*, the *gross overdraft charge* for each day is reduced based on an institution's *deductible.* The deductible represents a threshold average level of overdrafts that an institution may incur without being charged a fee. This deductible is intended to provide liquidity to the payment system and to compensate for overdrafts caused by minor computer outages at Reserve Banks. The deductible is likely to allow a large number of institutions to be exempt from overdraft charges for any given two-week period.

The deductible is equal to 10 percent of an institution's qualifying capital for daylight overdraft purposes; this amount is valued at the daily rate charged for overdrafts described above. However, unlike the effective daily rate used to calculate the gross overdraft charge, the portion of the day for which the daily rate is applied to the deductible is fixed at 10 out of 24 hours; this calculation will not change even if Fedwire operating hours are increased.

Example of Daylight Overdraft Charge Calculation

Policy parameters:

- Official Fedwire day = 18 hours
- Deductible percentage of capital = 10%
- Rate charged for overdrafts = 36 basis points (annual rate)

Institution's parameters:

- Risk-based capital = $50 million
- Sum of end-of-minute overdrafts for one day = $4 billion

Daily charge calculation:

Effective daily rate = .0036 x (18/24) x (1/360) = .0000075
Average overdraft = $4,000,000,000 / 1081 minutes = $3,700,278
Gross overdraft charge = $3,700,278 x .0000075 = $27.75
Value of the deductible = .10 x $50,000,000 x .0000042* = $21.00
Overdraft charge = 27.75 – 21.00 = $6.75

Identical daily overdraft activity for each day of the reserve maintenance period (generally 10 business days) would result in a two-week overdraft charge of $67.50.
* Deductible daily effective rate calculation = .0036 x (10/24) x (1/360) = .0000042

The rate charged for daylight overdrafts is quoted on the basis of a 360-day year and a 24-hour day. This annual rate was set initially at 24 basis points when pricing was implemented on April 14, 1994, and was increased to 36 basis points on April 13, *1995* for a minimum of two years. The Board will evaluate the desirability of any further increases in the fee. Any changes to the fee resulting from that review will be announced with a reasonable lead-time for implementation.

The annual rate is converted to an *effective rate* by multiplying it by the fraction of the day that Fedwire is scheduled to be open, currently 18 hours out of 24, or 18/24. Thus the current effective rate charged for overdrafts is 27 basis points (36 basis points x 18/24 hours) on an annualized basis. The effective annual rate is converted to an effective daily rate by multiplying it by 1/360.

Billing and adjustments

At the end of each two-week reserve maintenance period, a report of preliminary daylight overdraft charges will be prepared and sent to each institution that incurred charges in that period. This report will be in the format shown at the end of this Section. The information detailed on this statement will include the average daylight overdraft incurred each day in the two-week period, the gross daylight overdraft charge before the value of the deductible is subtracted, and the calculated charge for each day. Any adjustments will also be noted on the statement.

Final charges will be calculated and an assessment to the institution's Federal Reserve account will be made at the end of the next reserve maintenance period. All two-week charges of *$25* or less for any institution will be waived. Note that earnings credits from the holding of clearing balances cannot be used to offset overdraft charges.

Adjustments to calculated daylight overdraft charges may be appropriate in certain limited circumstances, such as to recognize Reserve Bank errors or incorrect accounting entries. Adjustments will be considered, if requested by an institution, in cases when the adjustment would reduce the fee charged to the institution.

Sample Daylight Overdraft Charge Report

RUN DATE: 04/09/98
RUN TIME: 02:02:39

FEDERAL RESERVE BANK

PROGRAM: DOPQ462U
PAGE: 1

STATEMENT OF DAYLIGHT OVERDRAFT CHARGES
TWO-WEEK PERIOD ENDING 03-25-98

ABA:
| ___________ ___________ |

RISK BASED CAPITAL: 3,028,000
AS OF: 12-31-97
VALUE OF DEDUCTIBLE: 1.26

DATE (1)	AVERAGE DAYLIGHT OVERDRAFT (2)	GROSS OVERDRAFT CHARGE AMOUNT (3)	DAYLIGHT OVERDRAFT CHARGE (4)
03-12-98	376,200	2.82	1.56
03-16-98	635,741	4.77	5.31
03-18-98	412,415	3.09	1.83
03-19-98	311,269	2.33	1.07
03-20-98	241,984	1.81	0.55
03-23-98	1,324,888	9.94	8.68
03-25-98	382,556	2.87	1.61

TOTAL CHARGE: 18.81

|**| = CERTAIN TIMEINTERVALS WERE EXCLUDED FROM THE AVERAGE OVERDRAFT CALCULATION BECAUSE OVERDRAFTS IN THESE INTERVALS RESULTED FROM FEDERAL RESERVE PROCESSING PROBLEMS OR OTHER EXCEPTIONAL CIRCUMSTANCES.

THE ABOVE AMOUNT IS LESS THAN OR EQUAL TO THE WAIVER AMOUNT OF $25.00. NO CHARGE WILL BE ASSESSED.
CALCULATIONS AREM SHOWN BELOW.

VALUE OF THE DEDUCTIBLE = CAPTIAL *.1* ANNUAL CHARGE RATE OF .0036 * 1/360 * 10/24
GROSS OVERDRAFT AMOUNT = AVG DAYLIGHT OD * ANNUAL CHARGE RATE OF .0036 * 1/360 * 18/24
DAYLIGHT OVERDRAFT CHARGE = GROSS OVERDRAFT AMOUNT - VALUE OF THE DEDUCTIBLE

***** END OF REPORT *****

V. Daylight Overdraft Monitoring and Control

The information provided in this section is intended to assist institutions in monitoring their Federal Reserve account balances for the purpose of controlling daylight overdrafts. **All institutions that maintain Federal Reserve accounts are expected to monitor their account balances on an intraday basis. Institutions** should be fully aware of payments they are making from those accounts each day and how those payments are funded. Institutions are also encouraged to use their own systems and procedures, as well as the Federal Reserve systems described below, to monitor their Federal Reserve account balance and payment activity.

Understanding the method used in measuring an institution's account balance is important in developing the capability to control daylight overdrafts. The Federal Reserve's transaction posting rules have a significant impact on the measurement of an institution's account balance for daylight overdraft monitoring and pricing. These rules are discussed below, and detailed further in Appendix A.

Daylight overdraft measurement

Transaction posting rules

The posting time for a transaction refers to the time that resulting debits or credits are made to an institution's account balance for purposes of daylight overdraft measurement. Prior to October 1993, the net amount of an institution's non-Fedwire transactions for each day was posted at the beginning of the day if it resulted in a net credit, and at the end of the day if it resulted in a net debit. However, all ACH debits and credits were posted at the opening of the day, while interest and principal payments for book-entry government securities were credited by 9:15 a.m. Eastern time and original issues of Treasury securities were posted beginning at 9:15 a.m. Fedwire funds and securities transfers were posted as they occurred.

Because non-Fedwire transactions actually occur throughout the day, this method did not reflect the institution's actual account balance, and in many cases created significant intraday float. It also hindered effective intraday monitoring of the account balance, as the posting times for various transactions could not be determined until the end of the day.

Under the posting rules, all Fedwire funds and book-entry securities transfers continue to be posted to an institution's account as they occur throughout the day. For non-Fedwire transactions, quasi-real-time posting rules govern the timing of account debits and credits. An important feature of the new posting rules is a set of posting time options for check credit transactions. These check crediting options and specific posting times for various transactions are provided in Appendix A. These posting rules should help institutions control their use of intraday credit because they can monitor precisely at what time each transaction is credited or debited to their account. **Note that these posting times affect the calculation of the account balance for daylight overdraft monitoring and pricing purposes but do not affect the finality or revocability of the entry to the account.**

Monitoring daylight overdrafts

The Daylight Overdraft Reporting and Pricing System (DORPS)

The Daylight Overdraft Reporting and Pricing System, which the Federal Reserve uses to measure overdrafts for PSR policy compliance and pricing purposes, calculates the account balance of each institution on a minute-by-minute basis. Unlike ABMS, described below, which displays institutions' current account balance information during the day, DORPS operates on a biweekly processing cycle, extracting information from Reserve Banks' accounting systems once each day for use in generating reports for each two-week reserve maintenance period.

Debits or credits to an institution's account resulting from transfers of funds and securities over Fedwire and non-Fedwire transactions processed by Reserve Banks cause fluctuations in institutions' account balances throughout the day. An institution's account balance is measured by DORPS at the end of each minute (that is, at hh:mm:59*)* based on the institution's opening balance and all payment transactions posted to the institution's account up until that moment. The daylight overdraft measurement period begins with the current official opening time of Fedwire at 12:30 a.m. Eastern time and continues until the official closing time at 6:30 p.m. Eastern Time. In cases of unscheduled extensions of Fedwire hours, the final closing account balance is recorded as if it were the balance at the standard closing time, and balances between the scheduled and actual closing times are not recorded.

While DORPS may record positive as well as negative account balances, positive balances do not offset negative balances for purposes of determining compliance with net debit caps or for calculating daylight overdraft fees. However, where more than one account is maintained for an institution by Reserve Banks, the multiple accounts are consolidated for purposes of calculating the end-of-minute balance.

DORPS generates various reports at the end of each two-week reserve maintenance period that show useful information for monitoring daylight overdrafts, such as peak daily overdrafts for the period, overdrafts in excess of net debit cap, book-entry securities-transfer related overdrafts, non-Fedwire account activity, end-of-minute account balances for a particular day, and related ratios, such as the peak daily overdraft relative to net debit cap. Reserve Banks may make these reports available to institutions to assist in their internal account monitoring and control. These reports may also be provided by Reserve Banks in the process of counseling institutions that have incurred daylight overdrafts in excess of their cap.

DORPS is also used to calculate and assess charges for daylight overdrafts, as described in Section IV. In addition, DORPS maintains information on institutions' current reported capital in order to calculate their daylight overdraft caps. These capital data normally originate in institutions' regulatory reports, such as bank call reports. DORPS also stores historical data on institutions' account balances, overdrafts, and overdraft charges.

Real-time monitoring

The Account Balance Monitoring System is a Federal Reserve computer system that monitors an institution's account on a real-time basis during the period of the day that Fedwire is open. This system provides balance information as transactions occur and are processed in the Reserve Banks' accounting system. In addition, the ABMS has the capability to intercept or reject funds transfers from an institution's account, a capability known as "real-time monitoring." Real-time monitoring may be utilized to prevent an institution from transferring funds from its account if there are insufficient funds to cover the payment. Institutions will generally be notified prior to being placed in reject or intercept mode, discussed below. This designation may be suspended once the Reserve Bank determines that the institution's use of intraday Federal Reserve credit no longer constitutes a significant risk.

If an institution is placed in "reject" mode in ABMS, any outgoing Fedwire funds transfer that would cause an overdraft above a specified threshold, such as the institution's net debit cap plus any collateral pledged, would be immediately rejected back to the sending institution. The institution could then initiate the transfer again when sufficient funds became available in its account. If an institution is monitored in the "intercept" mode, sometimes referred to as the "pend" mode, outgoing funds transfers that would cause an overdraft in excess of the threshold will not be processed but will be held in a queue. These intercepted wire transfers will be either released by the Reserve Bank for processing once funds are available in the institution's account or rejected back to the institution. Reserve Banks will normally be in direct contact with an institution in the event that any of its funds transfers are intercepted.

Two balances, the *Daylight Overdraft (DLOD) balance* and the *account balance* are calculated within the ABMS for all depository institutions. The *DLOD balance* reflects the balance in the account according to the transaction posting rules described in Appendix A and is equivalent to the balance measured by DORPS. Under the posting rules implemented on October 14, 1993, the daylight overdraft account balances recorded in ABMS and measured through DORPS should be virtually identical. However, while DORPS takes an end-of-minute "snapshot," ABMS continuously updates balances as transactions are processed. The *account balance* includes the amount displayed in the *DLOD balance*, plus any debits and credits resulting from non-Fedwire transactions that have been processed by the Reserve Bank but are unavailable, according to the posting rules, as of the time of the ABMS inquiry.

In addition, a third balance, *Available Funds (AVL FNDS)*, shows funds available to an institution based on their *Daylight Overdraft* capacity. This balance is also used in determining when funds transfers are rejected or intercepted as a result of insufficient funds in an institution's account. It includes the sum of an institution's net debit cap, any collateral pledged, and any other amounts memo posted to the institution's account, plus either the *account balance* or the *DLOD balance;* Reserve Banks may choose to monitor institutions based on either the available *account balance* **or available DLOD** *balance* depending on the circumstances.

ABMS also provides useful monitoring tools for institutions. All institutions that have an electronic connection to the Federal Reserve's funds transfer service, such as a Fedline terminal or a computer interface connection, are able to review their intraday Federal Reserve account position in ABMS. While ABMS is not a substitute for an institution's own internal tracking and monitoring systems, it does provide real-time account information based on Fedwire funds and securities transfers. Additionally, debits and credits resulting from an institution's non-Fedwire payment activity are captured by ABMS as the transactions are processed in the Reserve Bank's accounting system. Information on accessing ABMS information (for instance, through Fedline) is available from any Reserve Bank.

VI. Controlling Risks in the Provision of Payment Services

This section presents an overview of methods for controlling the risks in providing payment services to customers. Even those institutions with negligible daylight overdrafts, including those eligible for the Exempt-from-filing status, should be familiar with the risks associated with the various payment services and methods used to control their exposure.

Any time an institution extends credit to a customer to make a payment or permits a customer to use provisional funds to cover a payment, the institution is exposed to the risk that the customer will not be able to meet its payment obligation in final funds. If the customer is unable or unwilling to repay the credit extension, the institution could incur a financial loss. Institutions are encouraged to establish intraday credit limits for their customers that use payment services actively, reflecting the creditworthiness of those customers. An institution should also review the financial condition of correspondents and counterparties on private clearing and settlement systems with which it transacts business.

Overview of risks in major payment systems

To control the risk to which an institution is exposed in processing payments for its own account or for its customers' accounts, it is necessary to understand the types of risks that arise in using various types of payment systems. The following discussion identifies risks in a range of payments services and suggests the types of control procedures that might be used to protect an institution from the risk of loss.

Large-dollar funds transfers

Many large-dollar funds transfers are made over the Federal Reserve's Fedwire system. An institution sending Fedwire payments is committed to settling for those payments. As a result, the institution should ensure that a customer has good funds in its deposit account before a funds transfer is made on its behalf. Otherwise, the institution must be willing to lend to the customer the amount of funds transferred based on the institution's credit policies. Real-time verification of customers' account balances, including credit limits that have been established, may be performed manually by an institution that processes a very low volume of large-dollar payments or automatically through systems that incorporate intraday customer balances.

Book-entry securities transfers

Book-entry securities transfers made over Fedwire are unique in that transfers are originated by the party sending the securities and the securities and funds payment are exchanged simultaneously. Thus, the sender's funds account is credited and its securities account is debited when the outgoing transfer is processed, while the receiving party's funds account is debited and its securities account credited when the incoming transfer is received.

Because an institution receiving book-entry securities transfers does not control the time at which transfers are received, it is often difficult to control daylight overdrafts caused by such activity. Thus, providing services to customers that are active participants in the secondary market for government securities or that invest in repurchase agreements might expose an institution to the risk of loss if a customer were to fail before settling for a transaction.

To control the risk associated with clearing and settling for book-entry securities transfers, an institution should assess customer creditworthiness to ensure that the customer can fund daily activity consistently. It is important for an institution to understand the intraday flows associated with its customers' book-entry activity in order to determine when funding needs peak. Depending upon the creditworthiness of the customer and the nature of its activity, an institution might require the customer to advise it of anticipated incoming transfers, prefund all such anticipated transfers and return any if not prefunded, or collateralize all intraday overdrafts. To smooth out a customer's peak credit demands, an institution might consider imposing dollar limits on securities transfers of all, or selected, customers.

Clearing and settlement arrangements

An institution participating in privately operated clearing and settlement arrangements, such as a local check clearinghouse, a privately operated ACH system, an automated teller machine or point-of-sale network, or a credit card settlement arrangement, is exposed to the risk that one or more members of the arrangement will be unable to fund their settlement obligations. Participants in such arrangements should review the rules of the arrangement and determine the credit and liquidity risks to which they are exposed. For example, if a participant in a local check clearing arrangement were to default on its settlement obligation, it is likely the settlement for that arrangement would be recast and each of the other participants in the arrangement would experience a change in its net settlement obligations. In this situation, management should assure itself that it has the capability to obtain the necessary funding late in the day to cover such unexpected occurrences.

ACH originations and check transactions

Risks in processing ACH credit transactions arise for both the receiving and the originating institution. Institutions originating payments on behalf of customers have **a** binding commitment to make the payments when they deposit the file with an ACH processor. Because ACH is a value-dated mechanism and transactions may be originated one or two days before settlement day, the originating institution is exposed to temporal credit risk that can extend from one to three business days, depending upon when a customer funds the payments it originates. If the customer fails to fund the payments on the settlement day, the originating institution could suffer a loss.

Institutions should perform credit assessments and establish intraday credit or exposure limits on customers originating large dollar volumes of ACH credit transactions. Institutions should also monitor compliance with these limits across all processing cycles for a given settlement date. If the customer's financial condition were to worsen, the originating institution should require the customer to prefund its account, provide collateral, or deposit the ACH file on the night preceding the settlement day.

When an institution receives ACH credit transactions for its customers, it should assess the risk it faces in making funds available to its customers, given the provisional nature of these payments. In determining how ACH credit transactions should be made available to customers, an institution should consider the value of the individual transactions and the creditworthiness of the customers receiving the payments.

The major risk in originating ACH debit transactions and collecting checks for customers is return item risk. Return item risk extends from the day funds are made available to customers until the individual items can no longer legally be returned. The receiver of ACH debit transactions, or the payor of checks, has the right to return transactions for various reasons, including insufficient funds in its customer's account. Therefore, the risk faced by an institution originating ACH debit transactions or collecting checks depends on when it grants availability of funds to customers.

To minimize its exposure, an institution should perform credit assessments of all customers originating large dollar volumes of ACH debit transactions or for whom the institution collects large volumes of checks to ensure that if ACH or check items are returned after the customer has been granted use of funds, the customer will be able to return the funds to the institutions. For a customer whose financial condition is deteriorating, the institution should analyze the customer's return history and delay availability of funds or place holds on the account.

Third-party access arrangements

Some institutions have entered into arrangements under which a third party provides the operating facilities for its payment services. This may result in the third party service provider initiating Fedwire transfers for the institution's account.

Under the PSR policy, the Federal Reserve imposes certain conditions on third-party access arrangements. Information on compliance with the policy can be found in the *Guide to the Federal Reserve* s' *Payments System Risk Policy.* Of primary importance is the assurance that the participant, whose Federal Reserve account is being charged or credited for the transactions, will remain responsible for managing its Federal Reserve account with respect to both intraday and overnight positions. The participant must be able to monitor transfer activity conducted on its behalf.

Operating controls and contingency procedures

The integrity of operations is particularly important because operational errors and potential fraud can increase the cost of payment services and can, at the extreme, undermine the confidence of the public in the payments mechanism. Similar results can occur if payment systems are unreliable and parties making and receiving payments do not have confidence that payments will be made on a timely basis.

Controls over payment operations

An institution providing electronic payment services should be aware of and employ a comprehensive set of controls to ensure the integrity of the processing system, to limit access to devices and systems to authorized personnel, and to ensure that fraudulent or erroneous messages or payments are not entered into the system. The ability for employees or customers to initiate transactions should be strictly limited to authorized individuals. For example, physical access to payment creation facilities, such as terminals, should be strictly limited. Log-on identification and passwords should be changed regularly. Encryption or message authentication codes should be used to assure that payments are not altered during storage or transmission.

Most attempts at electronic payment fraud result from poor controls over “off-line” payment initiation or delivery, or payment instructions made via telephone, letter, or facsimile. An institution must ensure that originated messages come from authorized parties and that received messages are delivered to authorized parties. The types of controls that should be used include (1) maintaining authorized lists of institutions or customer personnel who are authorized to send or receive payments; (2) requiring code words known only to the two parties; (3) using multi-party call-back procedures; (4) recording and monitoring telephone calls; and (5) using message sequence numbering schemes for maintenance of audit trails. Additionally, the accuracy and validity of payments created by authorized staff should be monitored regularly. Procedures should require dual control over message creation and should ensure that audit trails of processed transactions are maintained.

Contingency procedures

Operational disruptions such as temporary loss of telecommunications or computer processing ability, or outages of longer duration, such as those caused by fire, flood, and earthquakes, create significant risk for an institution and its customers. In these situations, customer account balances may be frozen or unavailable and the ability to complete transactions and make payments may be seriously impaired.

For an institution processing low volumes of electronic payments, it may be practical to develop manual or off-line back- up procedures, or to acquire an extra Fedline terminal for backup purposes. An institution processing higher volumes of payments should develop contingency plans that include the availability of equipment such as terminals, personal computers, data communications equipment, and telephones. An institution using leased lines for telecommunications should consider installing back-up leased or dial access lines to the Federal Reserve and to its major customers. Finally, consideration should be given to obtaining a complete or partial disaster site where operations staff can be relocated.

APPENDIX A

TRANSACTION POSTING RULES

Rules for Posting Transactions to Federal Reserve Accounts for Daylight Overdraft Measurement Effective October 14, 1993

Opening balance

= *previous day's closing balance*

Post at 8:30 a.m. Eastern Time:

+/- Government and commercial ACH credit transactions

Both sides of the ACH credit transaction—the credit to the receiver and the debit to the originator—are posted simultaneously

\+ Treasury Electronic Federal Tax Payment System (EFTPS) investments from ACH credit transactions

\+ Advance notice Treasury investments

These include direct and special direct Treasury investments for which notification was given a day earlier.

\+ Stare and Local Government Series Treasury securities (SLGs) interest and redemption payments

\+ Treasury checks, postal money orders, local Federal Reserve Bank checks, and EZ-Clear Savings Bond redemptions in separately sorted deposits

These items must be deposited by 12:01 a.m. or later local time.

Post throughout the day:

+/- Fedwire funds transfers

+/- Fedwire book-entry securities transfers

+/- Net settlement entries

Settlement entries from the "settlement sheet" service will be posted on the next clock hour approximately one hour after settlement data are received by the Reserve Banks. The settlement sheet service will be discontinued by year-end 2001. Settlement entries from the enhanced settlement service will be posted on a flow basis as they are processed.

Post by *9:15* a.m. Eastern Time:

\+ U.S. Treasury and Government agency interest and redemption payments

\+ U.S. Treasury and Government agency matured coupon and definitive securities *These must be received before the maturity date.*

Post beginning at 9:15 a.m. Eastern Time

- Original issues of Treasury securities

Original issues of Government agency securities are delivered as Fedwire book entry securities transfers and are posted when the securities are delivered to the purchasing institutions.

Post at 11:00 a.m. Eastern Time:

+/- **Government and Commercial ACH debit transactions**

Both sides of the ACH debit transaction—the debit to the receiver and the credit to the originator—are posted simultaneously.

\+ EFTPS investments from ACH debit transactions

Post at 11:00 a.m. Eastern Time and hourly thereafter:

+/- Check corrections amounting to $1 million or more
+ Currency and coin deposits
+ Credit adjustments amounting to $1 million or more
+/- Commercial check transactions, including return items
- Check debits

Check debits are posted on the hour at least one hour after presentment. Checks presented before 10:01 a.m. Eastern Time will be posted at 11:00 a.m. Eastern Time. Presentment times will be based on surveys of endpoints' scheduled courier deliveries and so will occur at the same time each day for a particular institution.

+ Check credits

Institutions must choose one of two check credit posting options, (1) all credits posted at a single, float-weighted posting time, or (2) fractional credits posted throughout the day. The first option allows an institution to receive all of its check credits at a single time for each type of cash letter. This time may not necessarily fall on a clock hour. The second option lets the institution receive a portion of its available check credits on the clock hours between 11 a.m. and 6p.m. Eastern Time. The option selected applies to all of an institution's check deposits, including those for its respondents. Reserve Banks will calculate crediting fractions and float-weighted posting times for each time zone based on surveys. Credits for mixed cash letters and other Fed cash letters are posted using the crediting fractions or the float-weighted posting times for the time-zone of the Reserve Bank servicing the depositing institution. For separately sorted deposits, credits are posted using the posting times for the time zone of the Reserve Bank servicing the payor institution.

Post by 1:00 p.m. Eastern Time:

+ Same-day Treasury investments

These transactions represent direct and special direct Treasury investments for which notification is given on the same day.

Post at 2:00 p.m. Eastern Time:

+ Processed manual letters of credit submitted before 1:00 p.m. Eastern Time

Letters of credit transactions are drawdowns of government grants.

Post at 5:00 p.m. Eastern Time:

+ Treasury checks, postal money orders, and EZ-Clear
Savings Bond redemptions in separately sorted deposits

These items must be deposited by 4:00 Eastern Time.

+ Local Federal Reserve Bank checks

These items must be presented before 3:00 p.m. Eastern Time.

+ Processed manual letters of credit
+/- Same-day ACH transactions

These transactions include ACH return items, check truncation items, and flexible settlement items.

Post after the close of Fedwire funds transfer system:

+/- All other non-Fedwire Transactions

These transactions include the following: local Federal Reserve Bank checks presented after 3:00p.m. Eastern Time but before 3:00p.m. Local Time; noncash collection; credits for US. Treasury and government agency definitive security interest and redemption payments ~f the coupons or securities are received on or after the maturity date; Treasury Tax and Loan (TT&L) calls; subscriptions for SLGS; currency and coin shipments; small-dollar credit adjustment all debit adjustments; and small-dollar check collections. Discount window loans and repayments are normally posted after the close of Fedwire as wel4 however in unusual circumstances a discount window loan may be posted earlier in the day with repayment 24 hours later or a loan may be repaid before it would otherwise become due.

= Closing balance

APPENDIX B

GLOSSARY

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Glossary of Terms

Account Balance Monitoring System (ABMS)—The Federal Reserve's computer system that allows depository institutions with on-line access to Fedwire to view account balance information. ABMS also allows Federal Reserve Banks to monitor institutions' account positions and payment activity on a real-time basis.

ACH—Automated clearing house. An electronic batch processing service used to disburse or collect funds.

Administrative Reserve Bank—The Federal Reserve Bank with primary responsibility for daylight overdraft monitoring of an institution with Federal Reserve account activity in more than one Federal Reserve district.

Affiliate—Any company that controls, is controlled by, or is under common control with, a bank or nonbank bank (according to Federal Reserve Regulation Y).

Agreement corporation—A corporate subsidiary of a federal- or state-chartered bank having an agreement or undertaking with the Board of Governors, under Section 25 of the Federal Reserve Act, to engage in international banking and investments.

Bankers' Bank—An institution organized and chartered solely to do business with other banks, and primarily owned by the banks that it services. Bankers' banks do not take deposits or make loans to the public, and are not eligible for discount window access unless they voluntarily maintain reserves.

Basle Capital Accord—A 1988 agreement by the Committee on Banking Regulations and Supervisory Practices of the Group of Ten Countries that establishes a framework for bank capital measurement and capital standards.

Board-of-directors' resolution—A statement of intention to follow a course of action that is approved by a majority vote of a quorum of the board of directors of a corporation. In the context of the PSR policy, a board-of-directors' resolution would be adopted to convey approval to a Reserve Bank of a net debit cap category or an inter-affiliate transfer arrangement.

Board of Governors (Board)—The Board of Governors of the Federal Reserve System.

Book-entry securities transfer—Generally, electronic transfer of a U.S. Treasury or Government Agency security over the Fedwire system.

Cap—See **Net debit cap.**

Capital—See **Risk-based capital.**

Cap category—An institution's category or class for purposes of determining its daylight overdraft net debit cap. There are six cap categories: Zero, Exempt-from-filing, *De minimis*, Average, Above average, and High.

Cap multiple—The factors associated with each cap category for purposes of calculating the net debit cap.

Competitive Equality Banking Act (CEBA)—A federal law enacted August 10, 1987, that, among other things, prohibits nonbank banks and certain industrial banks from incurring daylight overdrafts in their Federal Reserve accounts on behalf of affiliates.

Daylight overdraft—A negative position in an institution's Federal Reserve account at any time during the business day.

> Book-entry overdraft—A daylight overdraft in an institution's Federal Reserve account caused by debits to the account resulting from the receipt of securities over Fedwire.
>
> Peak daily overdraft—The maximum end-of-minute negative account balance incurred on a particular day.
>
> Two-week average overdraft—The sum of the peak daily overdrafts over a two-week reserve maintenance period divided by the number of business days in the period.

Daylight Overdraft Reporting and Pricing System (DORPS)—The computer system used by the Federal Reserve to measure and to assess fees for daylight overdrafts in Federal Reserve accounts.

Deductible—A percent of an institution's capital that is used to determine the amount deducted from the gross overdraft charge for a day.

***De minimis* cap—**The cap category that permits an institution to incur daylight overdrafts up to a net debit cap equal to 40 percent of its capital.

Edge Act corporation—A corporate subsidiary of a domestic or foreign bank, established under section 25(a) of the Federal Reserve Act to engage in international banking and investments.

Effective daily rate—Under the PSR program, the annual rate charged for daylight overdrafts divided by 360 days, adjusted for the portion of the day during which Fedwire funds transfer system is officially operating.

End-of-minute balance—The balance in an institution's Federal Reserve account at the end of each minute (hh:mrn:59) as measured by DORPS for purposes of daylight overdraft reporting and pricing.

Exempt-from-filing—The daylight overdraft cap category that permits an institution to incur daylight overdrafts up to a cap equal to the lesser of $10 million or 20 percent of its capital.

Fedwire—The Federal Reserve funds and book-entry government securities transfer system.

Fractional posting times—The clock hours from 11:00 a.m. through 6:00 p.m. Eastern time, when a portion of check credits are posted for separately sorted cash letters drawn on a particular time zone or for mixed and other Fed cash letters deposited in a particular time zone. The percentage of check credits, by cash letter type, for each hour is determined by Reserve Banks based on surveys of check presentment times, and applies only to those institutions choosing the fractional posting time option for their check credits.

Float-weighted posting time—The float-neutral time at which check credits are posted for separately sorted cash letters containing checks drawn on a particular time zone or for mixed and other Fed cash letters deposited in a particular time zone. Float-weighted posting times are determined by Reserve Banks based on surveys of check presentment times, and apply only to those institutions choosing the float-weighted posting time option for their check credits.

Gross overdraft charge—The daylight overdraft charge calculated before being reduced by the deductible valued at the effective daily rate charged for overdrafts.

Industrial Bank—An institution as defined in section 2(c)(2)(H) of the Bank Holding Company Act. In general, an industrial bank is a state-chartered finance company that makes loans and raises funds by selling investment certificates or investment shares to the public.

Inter-affiliate transfers—Transfers of funds among affiliates that may be designed to reallocate daylight overdraft caps among the affiliated institutions; requires a special agreement under the PSR policy.

Liquidity—The ability to make payments as they become due in readily available funds.

Net debit cap—The maximum dollar amount of daylight overdrafts an institution is permitted to incur in its Federal Reserve account at any point in the day, or on average over a two-week period. The net debit cap is generally equal to an institution’s capital times the cap multiple for its cap category.

Net debit position—A negative intraday or interday balance in an account or a negative position with an institution’s counterparties in a private clearing and settlement arrangement.

Nonbank bank—In general, an institution that accepts deposits or makes commercial loans, but does not engage in both activities. Any institution that became a bank as a result of the enactment of CEBA and was not controlled by a bank holding company on the day before the CEBA enactment.

Overnight overdraft—A negative position in a Federal Reserve account at the Reserve Bank's close of business. Overnight overdrafts are subject to a penalty fee.

Posting rules—A schedule used for determining the timing of debits and credits to an institution's Federal Reserve account for various transactions processed by the Reserve Banks.

PSR policy—The Federal Reserve's Payments System Risk policy.

Real-time monitoring—The ABMS function that provides the ability to monitor an institution's Federal Reserve account balance as transactions occur throughout the day, and to reject or intercept outgoing funds transfers when they would cause an overdraft in excess of a given threshold.

Reserve maintenance period—A two-week period beginning on a Thursday and ending on a Wednesday over which most depository institutions must maintain required reserves and over which daylight overdrafts are monitored and charges may be assessed.

Risk-based capital—The "qualifying" or similar capital measure used to satisfy risk-based capital standards, as set forth in the capital adequacy guidelines of the federal financial regulatory agencies. For most institutions, risk-based capital equals Tier I plus Tier II capital.

Self-assessment—A procedure by which a depository institution assesses its own creditworthiness, intraday funds management, operational controls, contingency procedures, and credit policies in order to determine its appropriate cap category for daylight overdraft purposes.

Self-assessment cap—One of three cap categories for which institutions are required to complete a self-assessment. Self-assessment cap categories may be Average, Above average, or High.

Systemic risk—In the context of payment systems, the risk that liquidity or payment problems at one financial institution will be transmitted to other institutions.

Third-party access arrangements—An arrangement whereby a depository institution allows a third-party service provider to initiate payment activity, such as Fedwire transfers, from the depository institution's Federal Reserve account.

U.S. capital equivalency—Capital measure applied to U.S. branches and agencies of foreign banks for purposes of calculating net debit caps and the deductible used to calculate daylight overdraft charges.

Zero cap—The net debit cap category associated with a cap multiple of zero and resulting in a net debit cap of zero.